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Endangered Species: Difficult Choices

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M. Lynne Corn and Eugene H. Buck
Resources, Science, and Industry Division

Pamela Baldwin
American Law Division

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Endangered Species: Difficult Choices

SUMMARY

The 108th Congress is considering various proposals to amend the Endangered Species Act of 1973 (ESA). Major issues in recent years have included changing the role of science in decision-making, changing the role of critical habitat, reducing conflicts with Department of Defense activities, incorporating further protection for property owners, and increasing protection of listed species, among others. In addition, many have advocated including significant changes to ESA regulations made during the Clinton Administration in the law itself.

The ESA has been one of the more contentious environmental laws. This may stem from its strict substantive provisions, which can affect the use of both federal and non-federal lands and resources. Under the ESA, certain species of plants and animals (both vertebrate and invertebrate) are listed as “endangered” or “threatened” according to assessments of their risk of extinction. Once a species is listed, powerful legal tools are available to aid its recovery and protect its habitat. The ESA may also be controversial because dwindling species are usually harbingers of resource scarcity: the most common cause of listing species is habitat loss. Recent efforts in the House would modify ESA provisions that designate critical habitat, and that provide for scientific peer review.

The authorization for spending under the ESA expired on October 1, 1992. The prohibitions and requirements of the ESA remain in force, even in the absence of an authorization, and funds have been appropriated to imple-

ment the administrative provisions of the ESA in each subsequent fiscal year.

In the 108th Congress, two bills (H.R. 1662 and H.R. 2933) have been reported that would, respectively, address issues concerning scientific peer review and critical habitat. These bills may be brought to the House floor in September. Earlier, P.L. 108-108 (Interior appropriations) provided \$265 million for FY2004 for programs related to endangered species. P.L. 108-136 (Defense authorization) included an ESA amendment to direct that critical habitat not be designated on military lands under certain conditions when Integrated Natural Resources Management Plans are in effect.

P.L. 108-137 (Energy and Water appropriations) prohibited use of FY2004 or earlier funds to reduce water deliveries under existing contracts for ESA compliance for the silvery minnow on the Middle Rio Grande River unless water is obtained from a willing seller or lessor. The act also established an executive committee to oversee the Collaborative Program associated with this situation. P.L. 108-148 (Healthy Forests Act) authorized hazardous fuels reduction projects on BLM and national forest lands including those containing listed species habitat; directed establishment of a healthy forests reserve program to promote recovery of listed species; and directed the Secretary of the Interior to provide assurances to landowners whose enrollment in the healthy forests reserve program results in new conservation benefits for ESA-listed species.

MOST RECENT DEVELOPMENTS

On July 21, 2004, the House Resources Committee ordered two bills (H.R. 1662 and H.R. 2933) to be reported. The first would, among other things, change procedures for scientific peer review of specified actions. The second would modify procedures for designation of critical habitat. On June 17, the House passed H.R. 4568, the Interior appropriations bill, which would provide \$138.6 million for ESA and \$101.6 million for related programs within FWS. At a July 17, 2004, field hearing, the House Resources Committee, Subcommittee on Water and Power, discussed water allocation for endangered species in the Klamath basin. In addition, regulatory actions and court decisions have focused attention on the consultation process, including its relation to pesticide use and to forest fire management projects.

BACKGROUND AND ANALYSIS

Overview

The 1973 ESA (16 U.S.C. §1531-1543; P.L. 93-205, as amended) is a comprehensive attempt to protect species at risk of extinction and to consider habitat protection as an integral part of that effort. Under the ESA, species of plants and animals (both vertebrate and invertebrate) may be listed as either “endangered” or “threatened” according to assessments of the risk of their extinction. More flexible management can be provided for species listed as threatened. Distinct population segments of vertebrate species may also be listed as threatened or endangered, and consequently some populations of chinook, coho, chum, and sockeye salmon in Washington, Oregon, Idaho, and California are protected under the ESA, even as other healthy populations of these same species in Alaska are not listed and may be commercially harvested. More limited protection is available for plant species under the ESA. Once a species is listed, powerful legal tools, including penalties and citizen suit provisions, are available to aid the recovery of the species and the protection of its habitat. Use of these tools, or the failure to use them, has led to conflict. For more background information on the ESA, see CRS Report RL31654, *The Endangered Species Act: A Primer*, by Pamela Baldwin, Eugene H. Buck, and M. Lynne Corn.

The ESA is administered by the Fish and Wildlife Service (FWS) for terrestrial and freshwater species and some marine mammals, and by NOAA Fisheries for the remaining marine and anadromous species. The U.S. Geological Survey’s Biological Resources Division conducts research on species for which FWS has management authority; NOAA Fisheries conducts research on the species for which it is responsible.

As of August 9, 2004, a total of 1,074 species of animals and 749 species of plants had been listed as either endangered or threatened, of which the majority (519 species of animals and 746 species of plants) occur in the United States and its territories and the remainder only in other countries. Of the 1,265 U.S. species (up 3 since December 31, 2002), 1,023 are covered in recovery plans (up 23 since December 31, 2002). Of the U.S. species, 451 have designated critical habitat in some portion of their range. (See FWS at [<http://endangered.fws.gov/>] and the National Marine Fisheries Service (NOAA Fisheries, formerly NMFS) at [<http://www.nmfs.noaa.gov/endangered.htm>].)

At times, efforts to protect and recover listed species can be controversial; declining species tend to function like the proverbial canary in the coal mine, since declining species flag larger issues of resource scarcity and altered ecosystems. Past resource debates in which ESA-listed species were part of larger issues include Tennessee's Tellico Dam (water storage and construction jobs versus farmland protection and tribal graves, as well as snail darters); Pacific northwest timber harvest (protection of logging jobs and communities versus commercial and sport fishing, recreation, and ecosystem protection, as well as salmon and spotted owls); and Texas's Edwards Aquifer (allocation of water among various users with differing short- and long-term interests, as well as several spring-dependent species).

Recovered Species. Since the ESA was enacted in 1973, 39 U.S. and foreign species have been delisted. The reasons cited by FWS are (a) 16 due to recovery; (b) 9 due to extinction (but some may have been extinct when listed); (c) 7 due to new understanding of the taxonomy of the species (making some ineligible for listing under current law); and (d) 7 due to new information, including erroneous data provided to FWS at the time of listing. Recovered species include alligators, peregrine falcons (two subspecies), and three species of kangaroos. Extinct species include the dusky seaside sparrow, Guam broadbill (a bird), and two species of small fish living in desert springs. Those delisted due to taxonomic revision are four plants, two fish, and one duck. Species delisted due to new information or errors in original data include a turtle in India, three plant species, a frog, a tree shrew, and a butterfly. Major features of the Act are discussed below.

Prohibitions and Penalties. The ESA contains prohibitions on the "take" of endangered species; *take* means to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct" (16 U.S.C. §1532; harassment and harm are further defined in regulation at 50 CFR 17.3). There has been controversy over the extent to which habitat modification is prohibited. A 1995 Supreme Court decision held that the inclusion of significant habitat modification was a reasonable interpretation of the term "harm" in the ESA. (See CRS Report 95-778 A, *Habitat Modification and the Endangered Species Act: The Sweet Home Decision*.) The law also provides civil and criminal penalties for violations.

Listing. Species may be listed on the initiative of the appropriate Secretary or by petition from an individual, group, or state agency. The Secretary must decide whether to list the species based only on the best available scientific and commercial information, after an extensive series of procedural steps to ensure public participation and the collection of scientific information. These steps, including policies to solicit independent scientific peer review, are described in 59 FR 34270 (July 1, 1994). In deciding whether a species needs the protections of the ESA, the Secretary may not take into account the economic effects that listing may have; economic and other considerations are taken into account in structuring alternatives for assisting the species after listing. (See CRS Report RL30792, *The Endangered Species Act: Consideration of Economic Factors* by Pamela Baldwin, for an analysis of when and how the ESA allows consideration of economic factors.)

Critical Habitat. With certain exceptions, if a species is listed, the appropriate Secretary must designate critical habitat (CH) in areas where the species is currently found or which might provide additional habitat for the species' recovery. However, if the publication of this information is not "prudent" because it could harm the species (e.g., by encouraging vandals or collectors), the appropriate Secretary may decide not to designate

CH. The appropriate Secretary may postpone designation for up to one year if the information is not determinable (16 U.S.C. §1533). As of August 9, 2004, FWS has designated CH for 36% of listed domestic species.

As a practical matter, CH has not been designated for most listed species largely because FWS prefers to allocate its resources to listing new species, based on its interpretation of a regulation (50 CFR 402.02) that takes away much of the legal value of designating CH to the recovery of the species; yet FWS consistently loses cases brought against it for failure to designate CH. Several courts have found the regulation to be unlawful because it does not take into account the duty to recover listed species (*Sierra Club v. United States Fish and Wildlife Service*, 245 F. 3d 434 (5th Cir. 2001), cited with approval in *New Mexico Cattle Growers Ass'n v. FWS*, 248 F. 3d 1277 (10th Cir. 2001); *Gifford Pinchot Task Force v. USFWS*, 2004 U.S. App. LEXIS 16215 (9th Cir. August 6, 2004)). Others assert the value of CH; for example, the Center for Biological Diversity has released a study (see [<http://www.biologicaldiversity.org/swcbd/programs/policy/ch/Final.htm>]) concluding that CH designation enhances species recovery. See CRS Report RS20263, *The Role of Designation of Critical Habitat under the Endangered Species Act*, by Pamela Baldwin. According to FWS, CH designation shows its greatest conservation benefit when it includes areas not currently occupied by the species; these areas may be important as connecting corridors between populations or as areas where the species may be re-introduced.

CH is frequently misunderstood by the public to be a significant direct restriction on private landowners' authority to manage land. While a landowner may experience some restrictions on land management because of the presence of an ESA-listed species (through the ESA's prohibitions on "taking" a listed species) and the presence of CH may shed light on whether "harm" has occurred, the duty to avoid adverse modification of CH is an express obligation only for federal agencies and actions, or private (nonfederal) actors in actions with a federal nexus. (Also see *Issues in the 108th Congress*, below.)

Recovery Plans. The appropriate Secretary generally must develop a recovery plan for the conservation and survival of a listed species; these plans are not binding on federal agencies or others, but rather serve as guidelines. At first, recovery plans tended to cover popular species like birds or mammals, but a 1988 amendment forbade the Secretary from favoring particular taxonomic groups (16 U.S.C. §1533). The ESA and its regulations provide little detail on the requirements for recovery plans. As noted above, only a small fraction of species listed under the act have been delisted due to recovery. This result is not surprising, since two of the primary causes of species loss are the introduction of invasive species and habitat loss — problems which have not abated appreciably in recent years. In fact, of the 16 recovered species, these two relatively intractable causes were frequently not the primary factor in the decline of the species, and addressing these other factors played a substantial role in recovery. Examples of recovery in which habitat loss and invasive species were not considered the primary problem include American alligators, two subspecies of peregrine falcons, three species of kangaroos, and some populations of gray whales.

Land Acquisition and Cooperation. The federal government may acquire land to conserve (recover) listed species, and the ESA authorizes money from the Land and Water Conservation Fund for acquisition (16 U.S.C. §1534). The appropriate Secretary must cooperate with the states in conserving protected species and must enter into cooperative

agreements to assist states in their endangered species programs, if the programs meet certain specified standards. If there is a cooperative agreement, the states may receive federal funds to implement the program, but the states must normally provide a minimum 25% match. Under the 1988 amendments, the Cooperative Endangered Species Conservation Fund was authorized to provide for the state grants. While the authorized size of the fund is determined by a formula, spending from the fund still requires annual appropriation (16 U.S.C. §1535).

Permits and Consultation. Proposed actions that may have possible adverse impacts on listed species and permits may be issued in two ways. First, under §7 of the ESA, if federal agency actions (or actions of a nonfederal party that require an agency's approval, permit, or funding) may affect a listed species, the federal agency must ensure that those actions are "not likely to jeopardize the continued existence" of any endangered or threatened species, nor to adversely modify CH. To review the possible effects of their actions on listed species and CH, federal agencies must consult with the appropriate Secretary. If the Secretary finds that an action would jeopardize a listed species or adversely modify CH, the Secretary must suggest reasonable and prudent alternatives that would avoid these harms. Pending completion of the consultation process, agencies may not make irretrievable commitments of resources that would foreclose any alternatives. The Secretary then issues a written statement, called a *biological opinion*, that allows the agency or the applicant to take members of a species incidental to otherwise lawful activities without triggering the Act's penalties, subject to terms and conditions specified in the opinion (16 U.S.C. §1536).

Second, for actions without a federal nexus (i.e., no federal funding, permit, or license), the appropriate Secretary may issue permits under §10 of the ESA to allow the *incidental take* of species during otherwise lawful actions. An applicant for a permit must submit a habitat conservation plan (HCP) that shows the likely impact of the planned action; steps to be taken to minimize and mitigate the impact; funding for the mitigation; alternatives that were considered and rejected; and any other measures that the Secretary may require. The use of this section has been vastly expanded, and streamlined procedures are provided for activities with minimal impacts (50 CFR 17.22).

Exemptions; Emergencies. Proponents of a federal action may apply for an exemption from the prohibition against jeopardy for *that action* (not for a species). Under the ESA, a high-level committee (commonly called the "God Squad") decides whether to allow a project to proceed despite future harm to a species; at least five votes are required to pass an exemption. To date, this process has been little used and only one exemption (Grayrocks Dam, WY) has been granted and carried out. The Committee is required to accept the President's determination (under specified circumstances) on an exemption in declared disaster areas, but the ESA does not address other emergency actions or situations. The Committee must also grant an exemption if the Secretary of Defense determines that an exemption is necessary for national security (16 U.S.C. §1536). DOD has claimed that ESA conflicts with its readiness activities, but DOD has not requested any exemptions to date.

Miscellaneous. Other provisions specify certain exemptions for raptors; regulate subsistence activities by Alaskan Natives; prohibit interstate transport and sale of listed species and parts; control trade in parts or products of endangered species owned before the ESA went into effect; and specify rules for establishing experimental populations (16 U.S.C. §1539).

Major Provisions of Current International Law. For the United States, the ESA is the domestic implement legislation for the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES; TIAS 8249), signed by the United States on March 3, 1973; and the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere (the Western Hemisphere Convention; 50 Stat. 1354; TS 981), signed by the United States on October 12, 1940. CITES parallels the ESA by dividing its listed species into groups, according to the estimated risk of extinction, but uses three major categories (called *Appendices*), rather than two. In contrast to the ESA, CITES focuses exclusively on trade and does not consider or attempt to address habitat loss. (For more information on CITES, see [<http://www.cites.org/>].) The ESA makes violations of CITES violations of U.S. law if committed within the jurisdiction of the United States (16 U.S.C. §1538). The ESA also regulates import and export of controlled products and provides some exceptions. The 13th regular meeting of CITES parties will be held October 3-14, 2004, in Bangkok, Thailand. On August 18, 2003, FWS published a draft policy for enhancement-of-survival permits for foreign species listed under the ESA (68 *Fed. Reg.* 49512).

Issues in the 108th Congress

ESA reauthorization has been on the legislative agenda since the funding authorization expired in 1992, and bills have been introduced in each subsequent Congress to address various aspects of endangered species protection. The issues for Congress include effects of ESA on private and federal land use, perceived limited success in recovering species, agency use of scientific information, specific regional resource conflicts, and other matters. Below are descriptions of some of the issues most commonly raised, and of some of the bills in the 108th Congress to address them.

Critical Habitat Designation. Some critics argue that CH designation places undue burdens on landowners or that it conveys no conservation benefit. Others argue that FWS and NOAA Fisheries have misinterpreted and failed to enforce the current statute. There are also disagreements over the value and timing of CH designation. (See “Critical Habitat,” above, and “ESA Listing Caps, New and Old,” below.)

In the 108th Congress, H.R. 2933 would address some of the CH issues. As ordered to be reported by the House Resources Committee on July 21, 2004, the measure would require the Secretary to designate CH to the maximum extent “practicable,” as well as the current standard of “prudent, and determinable.” In light of the repeated FWS assertion that CH designation represents a poor use of agency resources, the addition of this word might allow FWS to designate CH for fewer species. With limited exceptions, FWS or NOAA Fisheries must designate CH at the time a species is listed. The bill would postpone CH designation to three years after listing or in connection with issuance of a recovery plan, and would preclude CH designation for any areas covered under a §10 incidental take permit (and possibly even under a submitted habitat conservation plan), or under a state or federal land conservation or species management program that offers substantially equivalent protection. It also would strengthen consideration of economic costs and benefits to governments and landowners. H.R. 2933 would also change the definition of CH to be habitat determined by field studies to be occupied and used for essential behaviors, plus additional habitat necessary for the survival, as opposed to recovery, of the species, as the law currently requires.

For military lands specifically, P.L. 108-136 eliminated new CH designations if the lands have Integrated Natural Resource Management Plans that “benefit species.” (See CRS Report RL32183, *Defense Cleanup and Environmental Programs: Authorization and Appropriations for FY2004*, by David M. Bearden; and CRS Report RL31415, *The Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), and Department of Defense (DOD) Readiness Activities: Background and Current Law*, by Pamela Baldwin.)

Use of “Sound Science”. The ESA requires that decisions to list a species be made “solely on the basis of the best scientific and commercial data available....” (See CRS Report RL31546, *The Endangered Species Act and Science: the Case of Pacific Salmon*, by Eugene H. Buck et al.) In several recent situations, economic and social disputes have resulted from actions taken to list, protect, and recover species under the ESA. Critics in some of these disputes suggest that science supporting ESA action is insufficiently rigorous or is mishandled by the agencies. Recent examples of these controversies have concerned the Canada lynx, Florida panthers, and Klamath River Basin suckers and coho salmon.

A major issue is how FWS and NOAA Fisheries are to respond when the “available” science is not extensive. Some suggest that considerations other than species conservation should prevail; others seek to change the current posture of the law by changing the role of “science.” For still others, many recent bills are seen as an attempt to undermine the ESA, which they see as having struck a reasonable balance, and they question whether an amendment concerning science is advisable or practical. These considerations are complicated by the costs and time required to acquire more complete data, particularly in connection with many lesser-known species. Many rare and endangered species are little studied because they are hard to find or because it is difficult to locate enough of them to support scientific research. In many instances, there may be little information on many species facing extinction, and only limited personnel or funds available to conduct studies on many of the less charismatic species, or those of little known economic import. What should be done in such instances?

The ESA does not elaborate on this question, but it could be argued that, combining the protective purpose of the ESA — to save and recover species — with the wording of “best ... data available,” arguably dwindling species should be given the benefit of the doubt and a margin of safety permitted. This is the position taken in the *FWS Handbook* at pp. 1-6, which states that efforts should be made to develop information, but if a biological opinion must be rendered promptly, it should be based on the available information, “giving the benefit of the doubt to the species,” with consultation possibly being reinitiated if additional information becomes available. This phrase is drawn from H.Rept. 96-697, p. 12 (1979), which stated that the “best information available” language was intended to allow FWS to issue biological opinions even when information was incomplete, rather than being forced to issue negative opinions. The report also states that if a biological opinion is rendered on the basis of inadequate information, the federal agency proposing an action has the duty to show its actions will not jeopardize a species and a continuing obligation to make a reasonable effort to develop information, and that the statutory language “continues to give the benefit of the doubt to the species.”

Current Scientific Peer Review Policies. To understand proposed changes, it is useful to outline current peer review policies. FWS and NOAA Fisheries developed a joint policy on Information Standards Under the Endangered Species Act (59 *Fed. Reg.* 34271

(July 1, 1994)) that might provide useful information on this issue. Under this policy, FWS and NOAA Fisheries are to receive and use information from a wide variety of sources, including from individuals. Submitted information may range from the informal — oral, traditional, or anecdotal — to peer-reviewed scientific studies, and hence the reliability of the information can also vary. Agency biologists are to review and evaluate all information impartially for purposes of listing, CH designation, consultation, recovery, and permitting actions, and to ensure that any information used by the Agencies to implement the ESA is “reliable, credible, and represents the best scientific and commercial data available.” Agency biologists are to document their evaluations of all information and, to the extent consistent with the use of the best scientific and commercial data available, use primary and original sources of information as the basis of recommendations. In addition, documents developed by Agency biologists will be reviewed to “verify and assure the quality of the science used to establish official positions, decisions, and actions”

Another aspect of this joint policy notes that in addition to the public comments received on proposed listing rules and draft recovery plans, the Services are also to formally solicit expert opinions and peer review to ensure the best biological and commercial information. For listing decisions, the Agencies are to solicit the expert opinions of three specialists and summarize these in the record of final decision. Special independent peer review can also be used when it is likely to reduce or resolve an unacceptable level of scientific uncertainty (59 *Fed. Reg.* 34270 (July 1, 1994)).

Court Cases on ESA and Science. Courts that have considered the “best data available” language have held that an agency is not obliged to conduct studies to obtain missing data (*Southwest Center for Biological Diversity v. Babbitt*, 215 F. 3d 58 (D.C. Cir. 2000)), but cannot ignore available biological information (*Connor v. Burford*, 848 F. 2d 1441 (9th Cir. 1988)), especially if the ignored information is the most current (*Southwest Center for Biological Diversity v. Babbitt*, 926 F. Supp. 920 (D.C. Ariz. 1996)). Nor may an agency treat one species differently from other similarly-situated species (*Id.*), nor decline to list a dwindling species and wait until it is on the brink of extinction in reliance on possible but uncertain future actions of an agency (*Biodiversity Legal Foundation v. Babbitt*, 943 F. Supp. 23 (D. D.C. 1996)). “Best scientific and commercial data available” is not a standard of absolute certainty, reflecting Congress’ intent that FWS take conservation measures before a species is conclusively headed for extinction (*Defenders of Wildlife v. Babbitt*, 958 F. Supp. 670, 679-680 (D. D.C. 1997)). If FWS does not base its listings on speculation or surmise or disregard superior data, the imperfection of the studies it does rely on does not undermine those studies as the best scientific data available — “the Service must utilize the best scientific ... data *available*, not the best scientific data *possible*” (*Building Industry Ass’n of Sup. Cal. v. Norton*, 247 F. 3d 1241, 1246-1267 (D.C. Cir. 2001), *cert. denied* 2002 U.S. LEXIS 479).

On the other hand, the availability of judicial review can help ensure that agency decisions and their use of scientific data are not “arbitrary or capricious” and that regulations are rationally related to the problems causing the decline of a species, especially when other interests are adversely affected. (See *Connor v. Andrus*, 453 F. Supp. 1037 (W.D. TX. 1978), striking down regulations totally banning duck hunting in an area in order to protect one listed species of duck.) Another court stated that the evidentiary bar FWS must clear is very low, but it must at least clear it. In the context of issuance of Incidental Take Permits under §10(a), this means the agency must demonstrate that a species is or could be in an area

before regulating it, and must establish the causal connection between the land use being regulated and harm to the species in question. Mere speculation as to the potential for harm is not sufficient (*Arizona Cattle Growers Association v. United States Fish and Wildlife Service*, 273 F. 3d 1229 (9th Cir. 2001)).

Bills in the 108th Congress. To address a perceived inadequacy of scientific review under ESA, a number of bills (e.g., H.R. 1097, H.R. 1253, H.R. 1662, S. 369, and S. 2009) to amend the ESA and its handling of scientific matters have been introduced in the 108th Congress. To date, only H.R. 1662 has been ordered to be reported. As ordered, the bill would provide for a highly structured peer review process in comparison to current law. Some of the key features of this bill are as follows. It would require that data used under the ESA comply with specified guidelines issued by the Office of Management and Budget under the Data Quality Act (§515 of P.L. 106-554), and that the agency give greater weight to empirical data that have been subjected to peer review. Another complex provision requires the Secretary to adopt regulations that establish criteria for what constitutes “best scientific data available.” The Secretary is required to “accept” and “acknowledge” data from landowners who observe the species on their property; peer review requirements for such data are unspecified. The Secretary must also describe the additional scientific data that would assist in preparing a recovery plan and the steps the Secretary plans to take to acquire the data; whether the Secretary is obliged to collect the data (as opposed to soliciting existing information from the scientific community and others, as under current law) is not specified.

Under H.R. 1662, three-person peer-review panels would be created for several agency actions (shown with numbers of such actions to date in FY2004, except as noted): changes in list of endangered or threatened species (13); additions or revisions of critical habitat (8); development of recovery plans (9); interagency consultations that result in a conclusion of jeopardy or adverse modification of critical habitat and proposals of reasonable and prudent alternatives (55 in FY2003, of which 53 were related to water diversion projects on the Platte and Colorado Rivers). The Secretary would be obliged to select reviewers from a list of persons recommended either by the National Academy of Sciences or by the governors of the affected states. Peer reviewers would be excluded if, among other things, they had “direct financial interests” in the outcome of the action, including grants, honoraria, consulting arrangements, or employment. Worded thus, this requirement might exclude university scientists with specific research interests in proposed species or their habitats. If funds are available, reviewers would receive compensation; opinions of reviewers would become part of the public record. The bill would expand participation of affected parties in agency consultations, as well as making other changes. For more information, see CRS Report RS21500, *The Endangered Species Act (ESA), ‘Sound Science,’ and the Courts*, by Pamela Baldwin, and CRS Report RL31546, *The Endangered Species Act and Science: The Case of Pacific Salmon*, by Eugene H. Buck, et al.

Specific Regional Resource Conflicts. One express purpose of the ESA is to “provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved” (16 U.S.C. §1531(b)). As open space dwindles and an increasing population puts pressures on our natural resources, the conservation of species and their habitats may highlight underlying resource and economic conflicts. Public values and affected economic interests may be complex and sometimes conflicting. The situations described below have been the subject of congressional oversight and legislative interest.

Klamath River Basin. Controversy erupted in 2001 when the Department of the Interior's Bureau of Reclamation (Bureau) announced it would not release water from Upper Klamath Lake — part of its Klamath irrigation project — to approximately 200,000 acres of farm and pasture lands within the roughly 235,000-acre project service area. The operational change was made to make water available for three fish species under ESA protection (two endangered sucker species, and a threatened coho salmon population). The Klamath Project straddles the Oregon/California border and has been the site of increasingly complex water management issues involving several tribes, fishermen, farmers, environmentalists, and recreationists. Upstream farmers are generally pitted against fishermen, Native American interests, and other downstream users, and many sides have policy concerns involving valuable sectors of the local economy. Farmers point to their contractual rights to water deliveries from the federal Klamath Project and to hardships for their families if water is cut off; others assert that the salmon fishery is more valuable and that farmers could be provided temporary economic assistance, while salmon extinction would be permanent. Still others assert that there are ways to serve all interests, or that the science underlying the determinations of the relevant agencies is simply wrong. Specifically at issue is how to operate the Bureau's project facilities to meet irrigation contract obligations without jeopardizing the three listed fish.

To address this issue, the Bureau issued a 10-year operations plan in February 2002 and a biological assessment (a process necessary under the ESA) for operating its Klamath Project. However, subsequent biological opinions found that the Bureau's 10-year operations plan would likely jeopardize the continued existence of the listed suckers and coho salmon, as well as adversely modify proposed critical habitat. Although the biological opinions issued on May 31, 2002, by the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (now called NOAA Fisheries) both included "reasonable and prudent alternatives," the Bureau formally rejected both final biological opinions and opted to operate under a one-year plan that it asserts complies with the opinions. While met with enthusiasm from area farmers, the Bureau's decision was met with much criticism and concern from environmentalists, fishermen, tribes, and others. On April 10, 2003, the Bureau issued its Klamath Project 2003 operations plan and noted that planning for multi-year operations of the project is ongoing; on April 7, 2004, the Bureau issued its 2004 operations plan. In both years, the Bureau states that the current year plan is consistent with the 2002 biological opinions. The ESA agencies (FWS and NOAA Fisheries) have not issued a biological opinion on the one-year operations plans and instead are working within the biological opinions released in May 2002.

Because of the controversy in 2001, the Secretary of the Interior asked the National Research Council (NRC) to evaluate the federal biological opinions that had been used to prevent the Bureau from delivering water to farmers in 2001. The NRC released an interim report in February 2002, and a final report in October 2003, both of which concluded there was neither sound scientific basis for maintaining Upper Klamath Lake levels and increased river flows as recommended in the 2001 biological opinions, nor sufficient basis for supporting the lower flows in the Bureau's original operations plan for 2001. Further, the NRC concluded (1) that recovery of endangered suckers and threatened coho salmon in the Klamath Basin might best be achieved by broadly addressing land and water management concerns and (2) that Klamath Project operations (as opposed to operation of other basin projects such as that on the Trinity River) were not the cause of a 2002 lower basin fish kill and that changes in project operation at the time of the fish kill would not have prevented it.

In the 108th Congress, H.R. 1760 would establish water conservation and habitat restoration programs in the Klamath River Basin and provide emergency disaster assistance to those who suffered economic harm from the Klamath River Basin fish kill of 2002. A prohibition on Interior Department funding for the Klamath Fishery Management Council was included in the FY2004 Interior Appropriations bill, passed by the House on July 17, 2003, but was deleted in conference (H.R. 2691, H.Rept. 108-330). On July 17, 2004, the House Resources Committee, Subcommittee on Water and Power, held a field hearing in Klamath Falls. It is unclear whether this hearing will spawn further congressional action.

Salmon Restoration. Salmon protection in the Pacific Northwest in general presents many difficult choices, especially because of recent droughts and the connection between regional hydropower facilities and fishery management decisions. NOAA Fisheries officials have listed a total of 26 distinct groups (called *evolutionarily significant units* or ESUs) of Pacific salmon and steelhead trout as either threatened or endangered. NOAA Fisheries officials are working closely with state, local, and tribal officials, as well as the public, to develop recovery measures addressing habitat restoration and other concerns. A final Federal Columbia River Power System biological opinion was released on December 21, 2000, that concluded that four Lower Snake River dams should remain in place for at least eight years, to allow for a more complete assessment of progress toward recovering endangered salmon, but this opinion was rejected and remanded to NOAA Fisheries by a federal court in May 2003.

Another case may have widespread significance on salmon listings. In *Alsea Valley Alliance v. Evans* (161 F. Supp. 2d 1154 (D. Or. 2001)), Judge Hogan remanded the listing of the Oregon Coast ESU of coho salmon as a threatened species, finding the listing to have been arbitrary and capricious under the Administrative Procedure Act. The ESA permits listing of a species, subspecies, or *distinct population segment*. This allows some species such as wolves to be listed in an area (the lower 48 states) even if a viable population exists elsewhere (e.g., Alaska). NOAA Fisheries had clarified in a policy statement what was meant by distinct population segment in the context of certain fish, equating *distinct population segment* with an *evolutionary significant unit* (56 *Fed. Reg.* 58612 (Nov. 20, 1991)). An ESU is a population that is “substantially reproductively isolated from other conspecific population units” and represents “an important component in the evolutionary legacy of the species” (56 *Fed. Reg.* 58618). However, the NOAA Fisheries policy on hatchery fish (58 *Fed. Reg.* 17573 (Apr. 5, 1993)) states that a hatchery population will not be considered part of an ESU if: (1) the hatchery population is of a different genetic lineage than natural populations; (2) artificial propagation has produced appreciable changes in the characteristics of a hatchery population that are believed to have a genetic basis; or (3) there is substantial uncertainty about the relationship between existing hatchery fish and the natural population (58 *Fed. Reg.* 17575).

The judge felt NOAA Fisheries erred in the coho salmon policy by including hatchery fish as within the coho ESU — as though the hatchery fish were genetically identical to naturally hatched fish in the same water source — but *not* counting the same hatchery fish when deciding whether to list the coho ESU. The court concluded that, *in this instance*, not considering the hatchery fish when making the listing decision was arbitrary and created a further distinction (hatchery-spawned vs. identical non-hatchery fish) below the level of distinct population segment, which the agency lacked authority to do. The court did not rule on whether genetically different hatchery fish could be excluded from an ESU altogether.

Although the United States did not appeal this decision, intervening parties appealed, and the 9th Circuit blocked implementation of the lower court decision until appellate proceedings are completed, thereby leaving the coho listing in place. The 9th Circuit on February 24, 2004 (358 F. 3d 1181) dismissed the appeal on procedural grounds, but the stay apparently remains in place until a final order is issued, at which time it apparently will be lifted. NOAA Fisheries indicated it would develop a new policy on hatchery fish, but to date has issued only a draft policy. Numerous petitions to delist other salmon ESUs have been filed, but no final actions have been taken and NOAA Fisheries has requested an extension to rule on the petitions in litigation on this issue. Whether courts will approve the current policy that permits excluding from an ESU hatchery fish from a dissimilar genetic lineage, or whether a new policy will be promulgated is not yet clear, but either course could have implications for salmon listings in general.

In the 108th Congress, H.R. 1945 would authorize the Secretary of Commerce to provide financial assistance to states for salmon habitat restoration projects in coastal waters and upland drainages; this bill was reported (amended) by the House Committee on Resources on September 16, 2003 (H.Rept. 108-272). On June 24, 2003, the Senate Environment and Public Works Subcommittee on Fisheries, Wildlife, and Water held a hearing on the NOAA Fisheries' 2000 Biological Opinion for ESA-listed anadromous fish as it affects operation of the federal Columbia River power system.

Rio Grande Silvery Minnow. Efforts to conserve water necessary for the Rio Grande silvery minnow from competing New Mexico water users (primarily the city of Albuquerque and irrigators) have ignited considerable controversy. At issue is the operation of two Bureau of Reclamation (BOR) water projects on the Middle Rio Grande: the San Juan-Chama Project and the Middle Rio Grande Project. Conservation groups have asserted that BOR's operations on the middle Rio Grande jeopardize the continued existence of the endangered silvery minnow, in violation of the ESA. BOR, on the other hand, claimed that existing water delivery contracts precluded the use of already appropriated water for the endangered fish. After years of litigation, the New Mexico District Court ultimately disagreed with BOR and found that withholding water from irrigators for ESA-related purposes was permissible under the water contracts at issue. This decision was later affirmed by the Tenth Circuit in *Rio Grande Silvery Minnow v. Keys*, 333 F.3d 1109 (10th Cir. 2003). The circuit court, in a narrowly drawn opinion, held that BOR had discretion under the contracts to reduce water deliveries to contractors to comply with ESA-related purposes (*Rio Grande Silvery Minnow*, 333 F.3d at 113-14). Some may argue that this decision could have far reaching implications and affect other BOR projects.

In December 2003, Congress passed the Energy and Water Development Appropriations Act of 2004 (P.L. 108-137). Section 208 of the Act prohibits the use of FY2004 or earlier fiscal year funds to reduce water deliveries under existing contracts for the purpose of ESA compliance in the Middle Rio Grande except through a willing sale or lease by a party otherwise entitled to such water. (To date, there have been a handful of such sales.) Section 209 establishes an executive committee to oversee the ESA Collaborative Program associated with this complex situation. The language in P.L. 108-137 was cited by some as being the first successful legislative override of federal requirements in the ESA's 30-year history. (Others might cite the override concerning Tellico Dam and the snail darter which preceded this override by 25 years.) Still, the passage of this legislation does not necessarily affect the precedential value, if any, of the Tenth Circuit's decision. The Energy and Water

Development Appropriations Act of 2005 (H.R. 4614), as passed by the House, does not appear to contain language similar to that of §§208 and 209. To date, legislation affecting operations in the Middle Rio Grande (S. 997 and H.R.2982) has been introduced, but no hearings have been held.

Counterpart Regulations: Pesticides and Fire Management Projects. 50 CFR §402.04 authorizes “counterpart” regulations that allow an action agency to determine that its actions are not likely to adversely affect listed species, without formal or informal consultation under §7 of the ESA, or a written concurrence from FWS or NOAA Fisheries. Although the regulation has been on the books for years, it has not been used until recently, and hence its validity has not yet been tested in the courts. Several new counterpart regulations have recently been finalized and suits challenging the regulations are expected.

New counterpart pesticide regulations were finalized on August 5, 2004 (69 Fed. Reg. 47732) for EPA regulatory actions on pesticides. Under the new rules, when the EPA is taking action to approve, permit, or authorize the sale, distribution, or use of a pesticide under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), the EPA will decide whether the FIFRA action is likely to jeopardize a species, or adversely modify critical habitat, and will describe the impact of any anticipated incidental takings, discuss reasonable and prudent measures to minimize the impacts, and summarize any information or recommendations from an applicant. If the EPA concludes the FIFRA action is not likely to adversely affect the listed species or critical habitat, it may pursue the alternative consultation process, though formal consultation remains an option. Under the alternative consultation process, the EPA may ask the FWS for information on listed species in an area affected by a FIFRA action; may request Service personnel to assist in an effects determination, and use its “best efforts” to include that representative in relevant discussions. An alternative consultation agreement can allow EPA to make the effects determination without informal or formal consultation or written concurrence from FWS. Effects decisions are to be reviewed by an EPA person trained in making such determinations. Critics note that the EPA has a poor record on consultations and was ordered to consult regarding pesticide impacts on salmon. (*Washington Toxics Coalition v. EPA*, Civ. No CO1-132C (W.D. Wa. 2002)), and fear that the new self-consultation process will allow more harm. Supporters counter that the new process will increase EPA flexibility and efficiency.

Counterpart regulations also were finalized December 8, 2003 (68 Fed. Reg. 68254), among the Forest Service, the Bureau of Land Management, the Bureau of Indian Affairs, the National Park Service, FWS, and NOAA Fisheries, relating to streamlining consultation on projects supporting the National Fire Plan.

Defense Department Activities. The events of September 11, 2001, focused attention not only on the CH issues previously discussed, but also on all statutes that might impinge on military training activities. The ESA allows for an automatic exemption for activities involving national security, but an exemption has never been sought on this basis, there are no regulations that elaborate on it, and little information is available as to how it might apply in practice. It is, however, worded as an exemption for an individual action of an agency and must be granted by the high-level committee (“God Squad”) assembled to consider exemptions. P.L. 108-136 added a requirement that impacts on national security be considered when critical habitat is designated. In addition, it precluded the designation of critical habitat for DOD lands subject to an Integrated Natural Resources Management

Plan that the Secretary determines benefits the species. See CRS Report RL31415, *The Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), and Department of Defense (DOD) Readiness Activities: Background and Current Law*, by Pamela Baldwin.

Under §7 of the ESA, the “reasonable and prudent alternatives” that FWS may suggest to an agency as part of consultation must be ones that “can be taken” by the agency. A regulation (50 CFR §402.02) elaborates on this requirement as being measures that are economically and technologically feasible and “that can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction.” In a case involving water use by the Army at Fort Huachuca, the final biological opinion of FWS required the Army to take actions allegedly beyond its authority (although the court noted that the Army had voluntarily agreed to do similar things in a memorandum of agreement). However, the court remanded the final opinion because of other flaws, so the extent to which actions beyond the authority of the Army to complete would actually have been required is not known. Section 321 of P.L. 108-136 addressed how water consumption at Fort Huachuca, Arizona, is to be considered under the ESA; and §322 created a task force to resolve ESA conflicts at Barry M. Goldwater Range, AZ. For additional information, see section on ESA in CRS Report RL32183, *Defense Cleanup and Environmental Programs: Authorization and Appropriations for FY2004*, by David M. Bearden.

Private Property and Takings. Some landowners fear that the presence of a listed species or the designation of their land as CH will result in restrictions on current or new activities on their land with subsequent loss of some or all of their property value. At the other end of the spectrum, there are those, particularly in the Northeast and Midwest, who value the presence of a rare plant (e.g., Virginia round leafed birch in southwestern Virginia) or butterfly (e.g., Karner blue in Wisconsin) on their land.

Under the Constitution, a person’s property cannot be taken by the government without “just compensation,” whether the taking occurs under the ESA or any other federal law. In the past, *taking* has been strictly interpreted by the courts and has not included restrictions on permitted uses or a decrease in the value of the land, unless the constraints are very severe and the prohibited uses could not have been barred at the time the property was acquired. The U.S. Court of Federal Claims ruled (in *Tulare Lake Basin Water Storage District, et al. v. United States*, 49 Fed. Cl. 313 (2001)) that water could not be taken from certain California irrigators to benefit endangered fish unless compensation was provided. However, the outcome of this case rests on facts that may not be present in other instances, including the particular language in the water delivery contracts, so the value of the case as precedent is not yet clear. Liability for a taking was not reconsidered by the appeals court, which dealt only with compensation (59 Fed. Cl. 246 (2003)).

Critics of the ESA would like to see it amended to provide compensation in a broader range of circumstances than those required under the Constitution. These critics generally propose that compensation be offered for some specified percentage decrease in the value of property owners’ assets (including losses related to use of their land), since they feel that property owners are otherwise being forced to bear the cost of a public benefit. Such provisions have been included in several bills introduced in previous Congresses; proponents usually include Fifth Amendment takings under the Clean Water Act (§404), but not takings pursuant to other national interests (e.g., homeland security, highway construction).

Opponents of a revised “taking” standard counter that they do not wish to see the ESA singled out as having a different, more generous standard for compensation than that required under current interpretation of the Constitution or for any other agency or law. They further state that the rights of property owners to use their land have never been absolute, and that regulation in the public interest (e.g., zoning) has long been accepted. The cost to the federal government from changed thresholds for compensation and the constraints that would likely be placed on the implementation of the ESA under a more lenient takings standard are among the contentious issues slowing action on ESA reauthorization. (See also CRS Report RL31796, *The Endangered Species Act and Claims of Property Rights ‘Takings’: A Summary of the Court Decisions*, by Robert Meltz.) However, both proponents and opponents of the ESA favor enacting incentives (primarily tax benefits) to encourage landowner cooperation. In the 108th Congress, §204 of H.R. 7 proposes to exclude landowner incentive payments under ESA §6 from gross income for tax purposes; H.R. 7 was reported (amended) by the House Committee on Ways and Means on September 16, 2003 (H.Rept. 108-270, Part I), and passed by the House on September 17, 2003.

Making the ESA More User-Friendly. Former Interior Secretary Babbitt initiated actions to decrease ESA conflicts in several ways. Joint FWS and NOAA Fisheries policies streamline permit procedures for small landowners, and other initiatives encourage landowners to increase protection for populations of listed species on their land. Under *safe harbor* agreements, landowners who increase suitable habitat can return to “baseline conditions” without penalty. *No surprises* agreements provide landowners with greater certainty regarding activities that might otherwise have triggered penalties, an incentive for landowners to develop Habitat Conservation Plans (HCPs), since a landowner properly implementing such an agreement is assured that there will be no further costs or restrictions on the use of the property to benefit the species covered by the HCP, except by mutual consent or in unforeseen circumstances in which changes may be implemented by the government without costs borne by the landowner. Modifications to the no surprises rule required revocation of an incidental take permit if the permitted taking would be inconsistent with the survival and recovery of the relevant listed species, and the inconsistency was not remedied in a timely fashion. These rules have recently been repropose (69 F.R. 29681 (May 25, 2004)) in response to litigation, but may still present the same issues. Federal managers also focused on listing species as threatened rather than endangered, to allow FWS to take advantage of the ESA’s more flexible provisions for protecting threatened species. While administrative changes have been made within the framework of existing law, there is great interest among some groups in codifying many of these changes in an amended ESA. Others are critical of the agreements as difficult to enforce and as locking in the government to inflexible long-term positions that sometimes are based on inadequate knowledge.

Additional Legislative Initiatives

In the 108th Congress, a number of bills concerning ESA have been introduced besides those mentioned previously. Among those under consideration is S. 2095, a scaled-down Senate version of H.R. 6, an omnibus energy bill whose conference report has been passed by the House but not the Senate. Section 347 of this version would establish a pilot project in Wyoming, Montana, Colorado, Utah, and New Mexico designed to improve coordination of federal permits, including ESA §7 permits. In addition, S. 1210/H.R. 3378 would assist in the conservation of marine turtles and their nesting habitat in foreign countries. S. 1210

was reported on October 17, 2003, by the Senate Committee on Environment and Public Works (S.Rept. 108-167); and passed by the Senate on October 31, 2003.

On December 3, 2003, President Bush signed P.L. 108-148, which authorizes the Secretary of Agriculture (National Forest System lands) and the Secretary of the Interior (Bureau of Land Management lands) to conduct hazardous fuels reduction projects on lands that contain threatened and endangered species habitat (§102(a)(5)); directs the Secretary of Agriculture to establish the healthy forests reserve program by the Forest Service to protect, restore, and enhance degraded forest ecosystems on private lands to promote the recovery of threatened and endangered species (§§501-503); and directs the Secretary of the Interior to provide safe harbor and similar assurances under the ESA to landowners who enroll in the healthy forests reserve program when such enrollment will result in new conservation benefits for ESA-listed species (§506).

Table 1. Funding for Endangered Species and Related Programs, FY2003-FY2005

(\$ in thousands)

	FY2003 Approp.	FY2004 Approp.	FY2005 Request	House Passed
Endangered Species Program				
Candidate Conservation	9,867	9,808	8,610	10,110
Listing	9,018	12,135	17,226	16,226
Consultation	47,459	47,146	45,450	47,200
Recovery	65,412	67,907	58,154	65,054
<i>Subtotal</i>	<i>131,756</i>	<i>136,996</i>	<i>129,440</i>	<i>138,590</i>
Related Programs				
Landowner Incentive Program ^a	-260	29,630	50,000	15,000
Stewardship Grants ^b	-65	7,408	10,000	5,000
Cooperative Endangered Species Conservation Fund ^c	80,473	81,596	90,000	81,596
Multinational Species Conservation Fund ^d	4,768	5,531	9,500	5,900
Neotropical Migratory Bird Fund ^d	2,981	3,951	—	4,400
Total FWS	219,653	265,112	288,940	250,486
NOAA Fisheries	188,316	179,819	216,088	^e
TOTAL (to date)	407,969	444,931	505,028	250,486

Sources: Annual budget justifications, House and Senate committee and conference reports.

a. \$40 million in FY2002 unobligated appropriations was rescinded, resulting in a net reduction for FY2003.

b. \$10 million in FY2002 unobligated appropriations was rescinded, resulting in a net reduction for FY2003.

c. In FY2004, \$50 million of this fund was derived from LWCF; the President's FY2005 budget request calls for entire amount to be derived from LWCF.

d. From FY2002-FY2005, the President's budget has proposed subsuming the Neotropical Migratory Bird Fund within the Multinational Species Conservation Fund, but to date Congress has rejected this proposal.

e. No action yet for this appropriation.

Appropriations Issues. Appropriations bills play an important role in the ESA debate. Appropriations provide funds for listing and recovery activities as well as finance FWS and NOAA Fisheries consultations necessary for permits, such as those with the Army Corps of Engineers on permits that are necessary for federal projects. See **Table 1** for recent ESA funding. For FY2005, the Administration requested \$289 million for FWS for ESA activities. The House-passed version of H.R. 4568 provided more funds than the Administration requested for the ESA program itself, and slightly more than for FY2004. However, it rejected increases for the related programs (see **Table 1**) that would benefit (a) listed species on private lands and (b) state ESA programs. It provided small increases for certain programs that would benefit foreign species. Overall, FWS funding for ESA and related programs would be \$38 million below the President's request, and \$15 million below FY2004 level. NOAA Fisheries does not yet have figures available for endangered species programs for the House-passed Commerce appropriations bill (H.R. 4754) for FY2005, since these funds are commingled with funds to protect marine mammals in its program for protected species.

ESA Listing Caps, New and Old. Beginning in FY1998, Congress enacted annual limits (*caps*) on funding FWS for its ESA listing function. This language limits FWS discretion to transfer funds to finance additional listings, so that if courts mandate agency action on listing certain species, other listings may not be able to be funded. FWS supported these limits to assure that funding for other agency programs could not be diverted to finance additional ESA listing activities. However, courts have held that budget constraints do not excuse an agency from compliance, in some circumstances. These limits have been approved by Congress in succeeding fiscal year appropriations bills. The FY2005 House-passed bill would limiting listing activities to \$16.2 million, of which no more than \$12.7 million would be used for most activities related to critical habitat designation. In FY2004, these figures were \$12.3 million and \$8.9 million, respectively.